## (FILE 'HOME' ENTERED AT 19:04:58 ON 18 JUL 2003)

	FILE	'CAPLUS' ENTERED AT 19:05:11 ON 18 JUL 2003
L1		307 S DYE? (5A) ((TRANSFER INHIB?) OR SCAVENG?)
L2		14 S L1 AND CROSSLINK?
L3		14 S L1 AND (CROSSLINK? OR (CROSS LINK?) OR CROSS-LINK?)
L4		28 S L1 AND (CROSSLINK? OR (CROSS LINK?) OR CROSS-LINK? OR COUPL?)
L5		14 S L3
T 6		14 FOCUS 15:1-

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ANSWER 1 OF 14 CAPLUS COPYRIGHT 2003 ACS
L6
AN
     1996:155557 CAPLUS
DN
     124:205653
ΤI
     Crosslinked copolymers as dye transfer
     inhibitors in laundry detergents
     Detering, Juergen; Schade, Christian; Perner, Johannes; Jaeger,
IN
     Hans-Ulrich
     BASF A.-G., Germany
PA
SO
     Ger. Offen., 11 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
IĊ
     ICM C11D003-37
     ·ICS
          C08F226-06; C08F271-02
ICA
     D06L001-12
ICI C11D003-37, C11D003-39, C11D003-395; C08F226-06, C08F226-00, C08F220-28,
     C08F220-60
     46-5 (Surface Active Agents and Detergents)
CC
FAN.CNT 1
                                             APPLICATION NO.
     PATENT NO.
                       KIND
                             DATE
PΤ
     DE 4421179
                       . A1
                             19951221
                                             DE 1994-4421179
                                                                19940617
                                            WO 1995-EP2111
     WO 9535360
                        A1
                             19951228
                                                                19950603
         W: AU, CA, JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL,
                                             CA 1995-2193127
                                                                19950603
     CA 2193127
                        AA
                             19951228
     AU 9526741
                                             AU 1995-26741
                                                                19950603
                        A1
                             19960115
     EP 765379
                             19970402
                                             EP 1995-921823
                                                                19950603
                        A1
     EP 765379
                        B1
                             19980909
             AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE
         R:
                                             JP 1995-501563
                                                                19950603
     JP 10501573
                        T2
                             19980210
                        Ε
                                             AT 1995-921823
     AT 170911
                             19980915
                                                                19950603
                        Т3
                                             ES 1995-921823
                                                                19950603
     ES 2120213
                             19981016
                                             US 1996-750478
                                                                19961217
     US 5830844
                        Α
                             19981103
PRAI DE 1994-4421179
                             19940617
     WO 1995-EP2111
                             19950603
     The title copolymers contain units derived from 1-vinylpyrrolidone (I),
     1-vinylimidazole or a deriv., and/or 4-vinylpyridine N-oxide and have particle size 0.1-500 .mu.m. A copolymer prepd. from I and
     N,N'-divinylethyleneurea was used as a dye transfer
ST
     vinylpyrrolidone copolymer crosslinking dye
     transfer inhibitor; vinylimidazole copolymer
     crosslinking dye transfer inhibitor;
     vinylpyridine copolymer crosslinking dye
     transfer inhibitor; divinylethyleneurea copolymer
     dye transfer inhibitor; ethyleneurea divinyl
     copolymer dye transfer inhibitor; laundry
     detergent dye transfer inhibitor; amine
     polymer crosslinking dye transfer
     inhibitor; particle size polymer dye transfer
     inhibitor
     Particle size
İΤ
        (laundry detergents contg. dye transfer
        inhibitors comprising copolymers with controlled)
ΙŤ
     Crosslinking
        (of copolymers as dye transfer inhibitors
        in laundry detergents)
IT
        (transfer inhibitors; crosslinked
        copolymers for use in laundry detergents)
IT
     Detergents.
```

(laundry, crosslinked copolymers as dye transfer inhibitors in) IT Amines, uses RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (polymers, dye transfer inhibitors; with controlled particle size for use in laundry detergents) 38743-73-6, N,N'-Divinylethyleneurea-1-vinylpyrrolidone copolymer ΙT 87865-40-5, N,N'-Divinylethyleneurea-1-vinylimidazole-1-87865-39-2 vinylpyrrolidone copolymer 174350-91-5 RL: NUU (Other use, unclassified); TEM (Technical or engineered material use); USES (Uses) (dye transfer inhibitors; with controlled particle size for use in laundry detergents) RN38743-73-6 RN. 87865-39-2 RN87865-40-5 RN174350-91-5 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2003 ACS L6 AN 1996:537266 CAPLUS DN 125:171549 Softening-through-the-wash laundry detergent compositions ΤI IN Van Leeuwen, Petrus Johannes; Convents, Andre Christian; Busch, Alfred PA Procter and Gamble Company, USA SO Eur. Pat. Appl., 21 pp. CODEN: EPXXDW DT Patent LA English ICM C11D003-00 IC C11D003-37; C11D003-12 ICS CĊ 46-5 (Surface Active Agents and Detergents) FAN.CNT 1 PATENT NO. KIND APPLICATION NO. DATE DATE EP 719856-19960703 EP 1994-870213 19941229 **A1** EP 719856 В1 20021016 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE ES 1994-870213 19941229 ES 2185645 Т3 20030501 PRAI EP 1994-870213 Α 19941229 The present invention relates to softness through the wash laundry detergent compns. capable of providing excellent color care and fabric softness benefits comprising a polymeric dye transfer inhibiting agent, and a clay softening system characterized in that the polymeric dye-transfer inhibiting agent is substantially water-insol.; preferably said agent is a crosslinked polymer. Optionally, the water-insol. polymeric dye-transfer inhibitor is used with a water-sol. polymeric dye-transfer inhibitor. Crosslinked poly(vinylpyrrolidone) is a typical water-insol. dye-transfer inhibitor, ST clay softener laundry detergent; dye transfer inhibitor crosslinked polymer detergent; polyvinylpyrrolidone crosslinked dye transfer inhibitor detergent ĬΤ Polyamines RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (N-oxides; softening-through-the-wash laundry detergent compns. contg. clay softeners and polymeric dye-transfer inhibitors) IT Softening agents (softening-through-the-wash laundry detergent compns. contg. clay

softeners and polymeric dye-transfer

```
inhibitors)
     Polymers, uses
TT
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (softening-through-the-wash laundry detergent compns. contg. clay
        softeners and polymeric dye-transfer
        inhibitors)
ΙŤ
     Detergents
        (laundry, softening-through-the-wash laundry detergent compns. contg.
        clay softeners and polymeric dye-transfer
        inhibitors)
IT
     Clays, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (smectitic, softening-through-the-wash laundry detergent compns. contg.
        clay softeners and polymeric dye-transfer
        inhibitors)
     9003-39-8D, Polyvinylpyrrolidone, crosslinked
IT
     RE: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (dye-transfer inhibitor;
        softening-through-the-wash laundry detergent compns. contg. clay
        softeners and polymeric dye-transfer
        inhibitors)
IT
     9045-81-2
                 180627-84-3D, Vinylimidazole-4-vinylpyridine
     N-oxide-vinylpyrrolidone copolymer, crosslinked
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (softening-through-the-wash laundry detergent compns. contg. clay
        softeners and polymeric dye-transfer
        inhibitors)
RN
     9003-39-8D
RN
     9045-81-2
     180627-84-3D
RN
     ANSWER 3 OF 14 CAPLUS COPYRIGHT 2003 ACS
L6
AN
     1997:278802 CAPLUS
DN
     126:252701
     Detergents containing polycarboxylate cobuilders and polymeric dye
TI
     -transfer inhibitors
     Boeckh, Dieter; Funhoff, Angelika; Jaeger, Hans-Ulrich; Schade, Christian;
IN
     Stein, Stefan; Rau, Iris; Denzinger, Walter; Kroner, Matthias
PA
     BASF A.-G., Germany
so
     Ger. Offen., 15 pp.
     CODEN: GWXXBX
DT
     Patent
LA
     German
IC
     ICM
         C11D003-37
     ICS
         C11D001-83
CC
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                                            APPLICATION NO.
                            DATE
                                                             DATE
                                           DE 1995-19532715 19950905
ÞΙ
     DE 19532715
                       A1
                            19970306
PRAI DE 1995-19532715
                            19950905
     Polycarboxylates with wt.-av. mol. wt. .ltoreq.25,000 are used as
     cobuilders in detergents with water-sol. polymeric dye-
     transfer inhibitors having wt.-av. mol. wt.
     .gtoreq.30,000 and(or) water-insol. crosslinked polymeric
     dye-transfer inhibitors with particle size
     0.1-500 .mu.m. Typical polymeric dye-transfer
     inhibitors have repeating units of N=vinylimidazole or
     4-vinylpyridine N-oxides.
ST
     polycarboxylate builder detergent; vinylpyridine oxide polymer dye
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transfer inhibitor; dye transfer
     inhibitor vinylimidazole polymer detergent
IT
     Detergents
     Dyes
        (detergents contg. polycarboxylate cobuilders and polymeric dye
        -transfer inhibitors)
     112-90-3D, Oleylamine, reaction products with polyaspartic acid
ΙŦ
     24937-72-2D, Poly(maleic anhydride), hydrolyzed
                                                        25608-40-6D,
     Polyaspartic acid, reaction products with oleylamine
     Polyaspartic acid, reaction products with oleylamine
                                                              26426-80-2,
     Isobutene-maleic anhydride copolymer
                                             29132-58-9, Acrylic acid-maleic
     acid copolymer
                      70205-95-7, Sodium polyglyoxylate
                                                           154913-47-0
     188708-69-2, Acrylic acid-maleic acid-vinyl propionate copolymer
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (detergents contg. polycarboxylate cobuilders and polymeric dye
        -transfer inhibitors)
     87865-40-5P, N,N'-Divinylethyleneurea-1-Vinylimidazole-1-vinylpyrrolidone
IT
    ·copolymer
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (dye-transfer inhibitor; detergents
        contg. polycarboxylate cobuilders and polymeric dye-
        transfer inhibitors)
IT
     25232-42-2, Poly(1-vinylimidazole)
                                           29297-55-0, 1-Vinylimidazole-1-
     vinylpyrrolidone copolymer
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (dye-transfer inhibitor; detergents
        contg. polycarboxylate cobuilders and polymeric dye-
        transfer inhibitors)
RŃ
     112-90-3D
     24937-72-2D
RN
RN
     25608-40-6D
RN
     26063-13-8D
RN
     26426-80-2
RN
     29132-58-9
RN
     70205-95-7
RN
     154913-47-0
RN
     188708-69-2
RN
     87865-40-5P
     25232-42-2
RN
     29297-55-0
RN
     ANSWER 4 OF 14 CAPLUS COPYRIGHT 2003 ACS
L6
     1996:607429 CAPLUS
AN
DN
     125:225161
     Preparation of agglomerated crosslinked vinylimidazole
TI
     copolymers for use as dye transfer inhibitors
     Schade, Christian; Schneider, Karl-Heinrich
IN
PA
     BASF A.-G., Germany
SO
     Ger. Offen., 8 pp.
     CODEN: GWXXBX
ĎΤ
     Patent ·
LA
     German
IC
         C08F026-06
     ICM
          C08F002-32; B01F017-52; C11D003-37
     C08G081-00; C08G081-02; C08G077-46
     46-5 (Surface Active Agents and Detergents)
     Section cross-reference(s): 35
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                             DATE
```

PΙ

DE 19505750

**A1** 

19960822

DE 1995-19505750 19950220

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WO 9626229
                            19960829
                                            WO 1996-EP575
                                                             19960210
                       A1
         W: JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     EP 811025
                       Α1
                            19971210
                                           EP 1996-901803
                                                             19960210
                            19981209
     EP 811025
                       B1
         R: BE, CH, DE, ES, FR, GB, IT, LI, NL
                       T2
                                           JP 1996-525351
     JP 115<u>001</u>70
                            19990106
                                                             19960210
     ES-2124627
                       Т3
                                           ES 1996-901803
                            19990201
                                                             19960210
     US 5804662
                                           US 1997-894364
                            19980908
                                                             19970819
PRAI DE 1995-1<u>950</u>5750
                            19950220
     WO 1996-EP575
                            19960210
     The title copolymers, useful as dye transfer
AB
     inhibitors in laundry detergents, are prepd. by radical polymn. of
     a monomer mixt. (e.g., N-vinylimidazole, N-vinylpyrrolidone, and
     N, N'-divinylethyleneurea) in a water-in-oil emulsion contg. .gtoreq.1
     emulsifier, azeotropic distn. of the water from the emulsion, and
     isolation of the copolymer as agglomerated finely divided particles, the
     emulsifier being a block copolymer having hydrophobic and hydrophilic
     blocks, e.g., Hypermer B 246, an oxirane-styrene block copolymer, or
     Tegopren 7006.
     vinylimidazole emulsion polymn dye transfer
st
     inhibitor; block copolymer emulsifier polymn vinylimidazole;
     crosslinking vinyimidazole copolymn emulsion; laundry detergent
     dye transfer inhibitor; imidazole vinyl polymn
     dye transfer inhibitor
IT
     Emulsifying agents
        (block copolymers; in prepn. of agglomerated crosslinked
        vinylimidazole copolymers for use as dye transfer
        inhibitors)
IT
     Dyes
        (prepn. of agglomerated crosslinked vinylimidazole copolymers
        as dye transfer inhibitors in detergents)
IT
     Polymerization
        (emulsion, of agglomerated crosslinked vinylimidazole
        copolymers for use as dye transfer
        inhibitors)
IT
     Detergents
        (laundry, prepn. of agglomerated crosslinked vinylimidazole
        copolymers for use as dye transfer
        inhibitors in)
   Siloxanes and Silicones, uses
  RL: NUU (Other use, unclassified); TEM (Technical or engineered material
     use); USES (Uses)
        (polyether-, emulsifier; in prepn. of agglomerated crosslinked
        vinylimidazole copolymers for use as dye transfer
        inhibitors)
ĨΤ
     Polyethers, uses
     RL: NUU (Other use, unclassified); TEM (Technical or engineered material
     use); USES (Uses)
        (siloxane-, emulsifier; in prepn. of agglomerated crosslinked
        vinylimidazole copolymers for use as dye transfer
        inhibitors)
ĨΤ
     87865-39-2P, N,N'-Divinylethyleneurea-N-vinylimidazole copolymer
     87865-40-5P, N,N!-Divinylethyleneurea-N-vinylimidazole-N-vinylpyrrolidone
     copolymer
     RL: IMF (Industrial manufacture); NUU (Other use, unclassified); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (agglomerated crosslinked particles prepd. by emulsion
        polymn. for use as dye transfer inhibitors
IT
     107311-90-0, Ethylene oxide-styrene block copolymer
                                                            117753-68-1
     Hypermer B 246
   RL: NUU (Other use, unclassified); TEM (Technical or engineered material
     use); USES (Uses)
```

(emulsifier; in prepn. of agglomerated crosslinked vinylimidazole copolymers for use as dye transfer inhibitors)

RN87865-39-2P

87865-40-5P RN

RN107311-90-0

117753-68-1 RN

ANSWER 5 OF 14 CAPLUS COPYRIGHT 2003 ACS L6

ΑN 1997:33971 CAPLUS

DN 126:76517

Use of water-insoluble, **crosslinked** polymers having pyrrolidone, TI imidazole, or pyridine side chains as dye-transfer inhibitors for detergents

IN Boeckh, Dieter; Jaeger, Hans-Ulrich; Funhoff, Angelika; Schade, Christian; Stein, Stefan

your

PΑ BASF A.-G., Germany

Ger. Offen., 12 pp. SO

CODEN: GWXXBX

DT Patent

LA German

IC

ICM C11D001-83
46-5 (Surface Active Agents and Detergents) CC

FAN CNT 1

11111.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡÍ	DE 19519337	A1	19961128	DE 1995-19519337	19950526
	WO 9637598	A1	19961128	WO 1996-EP2113	19960517

W: CA, JP, US RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE PRAI DE 1995-19519337 19950526 GΙ

$$H_2C = CHN$$
 $R$ 
 $R^2$ 
 $R^1$ 
 $I$ 

AB Water-insol., crosslinked polymers prepd. from 1-vinylpyrrolidone and(or) vinylimidazole derivs. I (R, R1, R2 = H, C1-4 alkyl, or Ph) or 4-vinylpyridine N-oxide and having .gtoreq.90% particles with size 0.1-500 .mu.m are useful as dye-transfer inhibitors for detergents contg. bleaching agents and .ltoreq.8% alkylbenzenesulfonates.

pyrrolidone group polymer manuf detergent additive; alkylbenzenesulfonate detergent dye transfer inhibitor;

dye transfer inhibitor detergent bleach contg;

pyridine group polymer manuf detergent additive; imidazole group polymer manuf detergent additive

IT Bleaching agents

Detergents

Dyes

IT

(use of water-insol., crosslinked polymers having pyrrolidone, imidazole, or pyridine side chains as dyetransfer inhibitors for detergents)

11138-47-9, Sodium perborate 15630-89-4, Sodium percarbonate

```
RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
         (bleach; use of water-insol., crosslinked polymers having
        pyrrolidone, imidazole, or pyridine side chains as dye-
        transfer inhibitors for detergents).
IT
     162328-49-6P
                     185041-24-1P
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
         (use of water-insol., crosslinked polymers having
        pyrrolidone, imidazole, or pyridine side chains as dye-
        transfer inhibitors for detergents)
     98-11-3D, Benzenesulfonic acid, C10-13 alkyl derivs., sodium salts, uses
     RL: PRP (Properties); TEM (Technical or engineered material use); USES
     (Uses)
         (use of water-insol., crosslinked polymers having
        pyrrolidone, imidazole, or pyridine side chains as dye-
        transfer inhibitors for detergents)
RN
     11138-47-9
RN
     15630-89-4
RN
     162328-49-6P
RN
     185041-24-1P
RN
     98-11-3D
     ANSWER 6 OF 14 CAPLUS COPYRIGHT 2003 ACS
AN
     2001:319571 CAPLUS
DN
     134:327846
ΤI
     Wrinkle resistant composition and container article
     Altmann, Markus W.; Hubesch, Bruno Albert Jean; Soyez, Heidi Simonne
IN
PA
     The Procter & Gamble Company, USA
SO
     Eur. Pat. Appl., 29 pp.
     CODEN: EPXXDW
DT
     Patent .
LA
     English
IC
     ICM D06M015-11
          D06M015-423; D06M015-61; C08L039-06
CC
     40-9 (Textiles and Fibers)
FAN.CNT 1
     PATÈNT NO.
                       KIND
                             DATE
                                             APPLICATION NO.
                       ----
                             ______
                                             ____________
ΡI
     EP 1096056
                       A1
                             20010502
                                             EP 1999-870222
                                                               19991027
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, IE, SI, LT, LV, FI, RO
                                             WO 2000-US29768
                                                               20001027
     WO 2001031113
                        Α1
                             20010503
             AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX,
             MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     BR 2000015097
                             20020716
                                          BR 2000-15097
                        Α .
                                                               20001027.
     EP 1224354
                                             EP 2000-973986
                        A1
                             20020724
                                                               20001027
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003513177
                        T2
                             20030408
                                             JP 2001-533244
                                                               20001027
PRAI EP 1999-870222
                        Α
                             19991027
     WO 2000-US29768
                        W
                             20001027
     A wrinkle reducing compn. comprises a crosslinking resin having
AB
    the property of being cationic such as quaternary ammonium resin and a
     component being co-crosslinked with the resin and/or a component
```

comprising .gtoreq.1 unit which provides a dye transfer inhibiting benefit. The title compn. provides that when the crosslinking resin is a polyquaternary amine resin of polyamide polyamine epichlorohydrin adduct at 15%, the amino functional polymer is not ethoxylated polyethyleneimine at 5%. Fabrics are treated for imparting various benefits including reducing wrinkles; improving the natural drape of fabrics, imparting a crisp finish to fabrics, reducing the time and/or effort involved to iron fabrics, imparting crease resistance to fabrics, imparting post wash wrinkle resistance to fabrics, imparting in-wear wrinkle resistance to fabrics, imparting a redn. of the fabric aging upon multiple application. An example compn. contained Kymene 557H 5, Luviskol K 30 1, silicone surfactants 2.5, diethylene glycol 0.25, perfume 0.05%, and the balance water. cationic crosslinking resin fabric wrinkleproofing; polyvinylpyrrolidone wrinkleproofing agent; dye transfer inhibitor wrinkleproofing agent Creaseproofing (agents; wrinkle resistant compn. contg. both cationic resin and component with dye transfer inhibiting benefit) Amines, uses Polyamines RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (wrinkle resistant compn. contg. both cationic resin and component with dye transfer inhibiting benefit) 106-89-8D, Epichlorohydrin, reaction products with adipic acid-diethylenetriamine copolymer 9002-98-6 9003-39-8, Luviskol K 30 9005-25-8D, Starch, cationic, uses 25085-20-5D, Adipic acid-diethylenetriamine copolymer, reaction products with epichlorohydrin 26062-79-3, Poly(diallyldimethylammonium chloride) 59680-46-5, Kymene 229645-44-7, Kymene ULX-2 289471-15-4, Dow Corning 949 557H 336787-09-8, Luresin KNU RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses) (wrinkle resistant compn. contg. both cationic resin and component with dye transfer inhibiting benefit) RE.CNT THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD (1) Bip Chemicals Ltd; GB 2185499 A 1987 CAPLUS (2) Noda Isao; US 5342875 A 1994 CAPLUS (3) Patel, K; US 4007005 A 1977 CAPLUS (4) Procter & Gamble; EP 0378871 A 1990 CAPLUS (5) Procter & Gamble; WO 9523840 A 1995 CAPLUS (6) Procter & Gamble; EP 0978556 A 2000 CAPLUS 106-89-8D 9002-98-6 9003-39-8 9005-25-8D 25085-20-5D 26062-79-3 59680-46-5 229645-44-7 289471-15-4 336787-09-8 CAPLUS COPYRIGHT 2003 ACS ANSWER 7 OF 14 2001:12573 CAPLUS 134:87952 Fabric care compositions having improved color fidelity for use in

ST

IT

IT

ÍΤ

RE

RN

RN

RN

RN

ŔŊ

ŘΝ

RN

RN

RN

RN

L6

AN

DN

TI

IN

PA

SO

detergents

Gordon, Neil James

PCT Int. Appl., 43 pp.

The Procter & Gamble Company, USA

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DT
     Patent
LA
     English
IC
     ICM C11D003-37
     ICS C11D003-00
CĊ
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND
                            DATE
                                            APPLICATION NO.
                                                              DATE
                                            WO 2000-US17649
                             20010104
                                                              20000627
PΙ
     WO 2001000767
                       Α1
             AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EĒ, EE, ES, FI, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
             MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                       P
PRAI US 1999-141557P
                             19990629
     Laundry and laundry detergent compns. comprise .gtoreq.0.1% fabric
     enhancement system of .gtoreq.1 polyamines and .gtoreq.0.1% transition
     metal-contg. dye protection system of an oligomer formed from the reaction
     of an imidazole and a crosslinking agent, preferably
     epichlorohydrin. A fabric care compn. contained Dye fixative Cartafix CB
     5.0, Bayhibit AM 1.0, Cl2trimethylammonium chloride softener 2.0, fabric
     enhancement agent Lupasol SKA 3.0, fabric enhancement agent Luviskol K 85
     3.5, heavy metal dye transfer inhibitor
     3.0%, and water.
ST
     polyamine fabric care compn detergent; imidazole epichlorohydrin/oligomer
     dye transfer inhibitor; graft polyamine fabric
     care compn
IT
     Polyamines
     RL: MOA (Modifier or additive use); USES (Uses)
        (fabric care agent in combination with transition metal-contg. dye
        protection system for detergents)
IT
     Detergents
        (laundry; including fabric care compns. having improved color fidelity
        and fade resistance and reduce fabric damage)
ÌΤ
     9002-98-6, Lupasol SK
                              316356-99-7, Lupasol SKA
                                                          316357-05-8, Luviskol K
     RL: MOA (Modifier or additive use); USES (Uses)
        (fabric care agent in combination with transition metal-contg. dye
        protection system for detergents)
ÍΤ
     68797-57-9, Imidazole-epichlorohydrin copolymer
     RL: MOA (Modifier or additive use); USES (Uses)
        (oligomeric, dye transfer inhibitor;
        transition metal-contg. dye protection system in combination
        with polyamine fabric care agent for detergents)
RE.CNT
              THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Basf AG; DE 19643133 A 1998 CAPLUS
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(3) Boeckh Dieter; WO 0049122 A 2000 CAPLUS
(4) Gosselink Eugene Paul; WO 0022077 A 2000 CAPLUS
(5) Henkel Kgaa; EP 0158260 A 1985 CAPLUS
(6) Hildebrandt Soren; WO 9914300 A 1999 CAPLUS
(7) Randall Sherri Lynn; WO 9829530 A 1998 CAPLUS
RN
     9002-98-6
RN
     316356-99-7
     316357-05-8
RN
RN
     68797-57-9
```

CODEN: PIXXD2

```
ANSWER 8 OF 14 CAPLUS COPYRIGHT 2003 ACS
L6
AN
     1996:653271 CAPLUS
DN
     125:303850
     Laundry article for preventing dye carry-over and indicator therefor
ΤI
     Johnson, Kaj A.; Van Buskirk, Gregory; Gillette, Samuel M.
IN
     Clorox Company, USA; Precision Fabrics Group, Inc.
PA
     PCT Int. Appl., 33 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
IC
     ICM B32B007-00
     ICS B32B027-00; D03D003-00; D03D015-00
CC.
     46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
     PATENT NO.
                      KIND DATE
                                           APPLICATION NO.
                                                            DATE
    WO 9626831
PΙ
                      A1
                            19960906
                                          WO 1996-US2531
                                                            19960222
       W: CA, JP, MX
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                 AA 19960906
A1 19971217
                                     CA 1996-2209173 19960222
     CA 2209173
                                           EP 1996-907115
     EP 812261
                                                            19960222
        R: DE, ES, FR, GB, IT
     JP 11501368 T2
                                           JP 1996-526355
                            19990202
                                                            19960222
PRAI US 1995-396853
                            19950301
     WO 1996-US2531
                           19960222
     A system for removing extraneous, random free-flowing dyes from laundry
AB
     washing applications comprises a laundry article that can freely circulate
     among items being laundered. The laundry article comprises a dye
     absorber and a dye transfer inhibitor which
     are introduced into a wash liquor via a support matrix. The dye absorber
     maintains a relational assocn. with the support matrix in the wash liquor,
     whereas the dye transfer inhibitor is
     delivered up from the support matrix to the wash liquor and may be evenly
     distributed through the wash liquor. The laundry article provides a
     method for preventing the redeposition of extraneous dyes onto other wash
     items, while simultaneously providing an indicator system for the
     manifestation of such scavenging process. A typical laundry article was
     manufd. by dipping a fabric composed of 54% wood pulp and 46% polyester
     fibers in a mixt. contg. Reten 203 (low-to-medium mol. wt., high-charge d.
     cationic resin) 100, Polycup 1884 (water-sol. epichlorohydrin-polyamide)
     50, and water 250 g, passing the impregnated fabric through 2 nip rollers,
     and cured 60 s at 300.degree.F.
     dye redeposition prevention system laundering; epichlorohydrin polyamide
     impregnated fabric; cationic resin impregnated fabric; pulp fabric
     impregnated dye redeposition preventer; polyester fabric impregnated dye
     redeposition preventer; fabric impregnated dye redeposition prevention
     system
IT
    Amphoteric substances
        (dye absorbers; impregnated fabrics contg. dye absorber and
        dye transfer inhibitor for preventing
        redeposition of dyes onto laundered garments with indicator
        for dye scavenging)
TT
     Proteins, uses
     Quaternary ammonium compounds, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye absorbers; impregnated fabrics contg. dye absorber and
       dye transfer inhibitor for preventing .
       redeposition of dyes onto laundered garments with indicator
        for dye scavenging)
IT
    Gums and Mucilages
    Oxidizing agents
        (dye-transfer inhibitors; impregnated
      fabrics contg. dye absorber and dye
```

transfer inhibitor for preventing redeposition of

```
dyes onto laundered garments with indicator for dye
        scavenging)
ΙT
     Enzymes
     Peptides, uses
     Polyamides, uses
     Polyamines.
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye-transfer inhibitors; impregnated
        fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
IT
     Pulp, cellulose
        (fabrics contq. polyester fibers and pulp fibers; impregnated fabrics
        contg. dye absorber and dye transfer
        inhibitor for preventing redeposition of dyes onto
        laundered garments with indicator for dye scavenging .
IT:
        (impregnated fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
IT
     Polyester fibers, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (impregnated fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
IT
     Surfactants
        (amphoteric, dye-transfer inhibitors;
        impregnated fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
IT
     Surfactants
        (cationic, dye-transfer inhibitors;
        impregnated fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
IT.
     Polyamides, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (poly(amino acids), dye-transfer inhibitors
        ; impregnated fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
     Carboxylic acids, uses
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polymers, impregnated fabrics contg. dye absorber and
        dye transfer inhibitor for preventing
        redeposition of dyes onto laundered garments with indicator
        for dye scavenging)
ĨΤ
     Polyamides, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (reaction products, with epichlorohydrin, dye absorbers; impregnated
        fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
ΙŤ
     120-93-4D, Imidazolidinone, derivs.
     RL: TEM (Technical or engineered material use); USES (Uses)
        (cationic polymers crosslinked by, dye absorbers; impregnated
```

```
transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
                                 1398-61-4, Chitin
                                                     3327-22-8, QUAB 188
IT
     67-48-1, Choline chloride
                9003-11-6, Ethylene oxide-propylene oxide copolymer
     9002-98-6
     26336-38-9, Poly(vinylamine)
                                  73071-59-7, Polycup 172
                                                              129807-53-0,
     Polycup 1884
                    182630-98-4
                                                182971-63-7
                                                              182971-66-0
     182971-67-1
                   182971-68-2
                                 182971-69-3
                                                             183074-46-6
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye absorber; impregnated fabrics contg. dye absorber and
        dye transfer inhibitor for preventing
        redeposition of dyes onto laundered garments with indicator
        for dye scavenging)
IT 106-89-8D, Epichlorohydrin, reaction products with polyamides
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye absorbers; impregnated fabrics contg. dye absorber and
        dye transfer inhibitor for preventing
        redeposition of dyes onto laundered garments with indicator
        for dye scavenging)
                         9003-39-8, PVP K-30
                                                 9004-67-5, Methyl cellulose
IT
     9000-30-0, Guar gum
     9005-32-7, Alginic acid 11137-98-7, Magnesium aluminate
                                                                 12304-65-3,
     Hydrotalcite
                    25232-42-2, Poly(vinylimidazole)
                                                       182482-80-0
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye-transfer inhibitor; impregnated
        fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
IT
     12619-70-4, Cyclodextrin
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye-transfer inhibitors; impregnated
        fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
TT
     79-10-7D, Acrylic acid, esters, polymers
                                                9012-76-4, Chitosan
     RL: TEM (Technical or engineered material use); USES (Uses)
        (impregnated fabrics contg. dye absorber and dye
        transfer inhibitor for preventing redeposition of
        dyes onto laundered garments with indicator for dye
        scavenging)
RN
     120-93-4D
RN
     67-48-1
RN
    1398-61-4
RN
     3327-22-8
ŔŊ
     9002-98-6
RN
     9003-11-6
RN
     26336-38-9
RN
     73071-59-7
RN
     129807-53-0
RN
     182630-98-4
RN
     182971-62-6
RN
     182971-63-7
RN
     182971-66-0
RN
     182971-67-1
RN
     182971-68-2
RN
     182971-69-3
RN
     182971-69-3
RN
     183074-46-6
ŔŊ
     106-89-8D
RN
     9000-30-0
```

fabrics contg. dye absorber and dye

RN

RN

9003-39-8 9004-67-5

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RN
      9005-32-7
RN
      11137-98-7
RN-
      12304-65-3
RN
      25232-42-2
RN
      182482-80-0
RN
      12619-70-4
RN
      79-10-7D
· RN
      9012-76-4
      ANSWER 9 OF 14 CAPLUS COPYRIGHT 2003 ACS
L6
AN
      2002:31096 CAPLUS
ĎΝ
      136:71573
      Laundry additive sachet for scavenging dyes and dirt
TI
      from wash water
      Porta, Antonella; Van der Heijden, Mark Pieter Adrie
IN
PA
      The Procter & Gamble Company, USA
so
      Eur. Pat. Appl., 26 pp.
      CODEN: EPXXDW
DT
      Patent
LA
      English
ÍC
      ICM C11D017-04
           C11D003-37; C11D003-12; D06F039-02
ČC
      46-5 (Surface Active Agents and Detergents)
FAN.CNT 1
      PATENT NO.
                         KIND
                                DATE
                                                 APPLICATION NO.
                                _____
                                                  ______
      EP 1170356
                          A1
                                20020109
                                            ٠.
                                                EP 2000-870155
                                                                     20000706
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
               IE, SI, LT, LV, FI, RO
      WO 2002004582
                                20020117
                                                 WO 2001-US20537 20010627
                          A2
      WO 2002004582
                                20020606
                          Α3
               AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
               CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE,
                                                                               ES, FI,
               FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,
               RU, TJ, TM
           RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
               BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
      AU 2001073039
                                20020121
                                                 AU 2001-73039
                                                                     20010627
                          Α5
PRAI EP 2000-870155
                          Α
                                20000706
      WO 2001-US20537
                          W
                                20010627
      The sachet comprises a cavity (sealed bag) in which is found a polymeric
      dye absorbing agent and a dirt binding agent. The sachet provides a
      system of scavenging fugitive dyes or pigments and
      dirt from laundry wash H2O. An example sachet was made from cotton yarn
      contg. crosslinked polyvinyl pyridine-N-oxide.
 ST
      polyvinyl pyridine oxide dye absorbing dirt binding sachet
 IT
      Surfactants
          (amphoteric; for laundry additive sachet for scavenging
         dyes and dirt from wash water)
 IT
      Surfactants
          (cationic; for laundry additive sachet for scavenging
         dyes and dirt from wash water)
IT
      Fibers
      RL: MOA (Modifier or additive use); TEM (Technical or engineered material
      use); USES (Uses)
          (cellulosic; laundry additive sachet for scavenging
         dyes and dirt from wash water)
 IT 
      Yarns
          (cotton; laundry additive sachet for scavenging dyes
         and dirt from wash water)
```

```
ΙT
     Polyolefin fibers
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
         (ethylene; laundry additive sachet for scavenging
        dyes and dirt from wash water)
IT
     Polyamines
     Proteins
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
         (for laundry additive sachet for scavenging dyes
        and dirt from wash water)
TT
     Laundering
         (laundry additive sachet for scavenging dyes and
        dirt from wash water)
 IT
     Polyamide fibers, uses
     Polypropene fibers, uses
     Polyurethane fibers
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
         (laundry additive sachet for scavenging dyes and
        dirt from wash water)
 IT
     Polyester fibers, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
         (laundry additive sachet for scavenging dyes and
        dirt from wash water)
IT
     9005-25-8, Starch, uses
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
         (cationic; for laundry additive sachet for scavenging
        dyes and dirt from wash water)
ΙT
     1398-61-4, Chitin
                         9002-89-5, Polyvinyl alcohol
                                                         9002-98-6 9012-76-4,
                9045-81-2, Polyvinyl pyridine-N-oxide 11137-98-7, Magnesium
     Chitosan
                 25232-42-2, Polyvinyl imidazole 26336-38-9, Polyvinylamine
     aluminate
     29132-58-9, Maleic acid/acrylic acid copolymer
                                                       182482-80-0, Polyvinyl
                   257633-16-2, Tinofix FRD
     oxazolidone
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
         (for laundry additive sachet for scavenging dyes
        and dirt from wash water)
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 6
 (1) Edwards, J; US 3694364 A 1972 CAPLUS
(2) Johnson, K; US 5698476 A 1997
 (3) Kleinschmidt, D; US 3816321 A 1974 CAPLUS
 (4) Procter & Gamble; WO 9915612 A 1999 CAPLUS
 (5) Wong, L; US 4108600 A 1978
 (6) Ziskind, S; US 5881412 A 1999
RN
     9005-25-8
RN
     1398-61-4
RN
     9002-89-5
     9002-98-6
RN
ŘN
     9012-76-4
RN
     9045-81-2
ŔN
     11137-98-7
ŔŊ
     25232-42-2
RN
     26336-38-9
RN
     29132-58-9
RN
     182482-80-0
RN
     257633-16-2
                               COPYRIGHT 2003 ACS
     ANSWER 10 OF 14 CAPLUS
L6
     1999:77984
                 CAPLUS
AN
DN
     130:308202
     Fungal peroxidase: its structure, function, and application
ΤI
```

AU Nakayama, Toru; Amachi, Teruo

Department of Biochemistry and Engineering, Tohoku University, Aoba-ku, CS Aoba Aramaki, Sendai, 980-8579, Japan

A review with 55 refs. Arthromyces ramosus, a novel hyphomycete,

Journal of Molecular Catalysis B: Enzymatic (1999), 6(3), 185-198 SO CODEN: JMCEF8; ISSN: 1381-1177

PΒ Elsevier Science B.V.

ĎΤ Journal; General Review

LA English

AB

CC 7-0 (Enzymes)

Section cross-reference(s): 9, 46

extracellularly produces a single species of a heme-contg. peroxidase. The A. ramosus peroxidase, ARP, shows a broad specificity for hydrogen donors and high catalytic efficiency as does the well-known peroxidase from horseradish roots (HRP). However, it also exhibits unique catalytic properties. These features permit a wide range of applications for ARP, including high-sensitivity chemiluminescent detn. of biol. materials, protein crosslinking, and dye-transfer inhibition during laundering. The primary and tertiary structures of ARP are very similar to those of the class (II) lignin and manganese peroxidases of the plant peroxidase superfamily. Mechanistic studies of the ARP-catalyzed reaction revealed that it also proceeds with the classical peroxidase cycle; the native ferric ARP undergoes two-electron oxidn. by hydrogen peroxide to yield compd. (I), followed by two successive one-electron redns. by the hydrogen donor. X-ray crystallog., site-directed mutagenesis, and spectral analyses of ARP have afforded detailed information on the mol. mechanism of the ARP catalysis, and revealed the roles of active site amino acid residues and dynamic features of coordination as well as spin states of heme iron during catalysis.

review Arthromyces peroxidase structure function mechanism ST

ŀΤ Detergents

(laundry, dye-transfer inhibitor;

structure, function, and application of peroxidase of Arthromyces ramosus)

IT Arthromyces ramosus

Chemiluminescence spectroscopy

Crosslinking agents

(structure, function, and application of peroxidase of Arthromyces ramosus)

9003-99-0, Peroxidase IT

> RL: ARG (Analytical reagent use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); CAT (Catalyst use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(structure, function, and application of peroxidase of Arthromyces ramosus)

RE.CNT THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Abelskov, A; Biochemistry 1997, V36, P9453 CAPLUS
- (2) Akimoto, K; Anal Biochem 1990, V189, P182 CAPLUS
- (3) Al-Kassim, L; J Chem Technol Biotechnol 1994, V61, P179 CAPLUS
- (4) Allain, C; Clin Chem 1974, V20, P470 CAPLUS
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- (6) Conrad, L; INFORM 1997, V8, P950
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                              20020429
                                              AU 2002-30406
                                                                20011012
                              20030709
                                              EP 2001-987789
     ĒP 1325107
                        A1
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                              20001013
PRAI US 2000-240320P
                        Ρ
     WO 2001-US42687
                        W
                              20011012
     A laundry additive article comprises an insol. (crosslinked)
     polymeric amine dye absorber (or anion exchanger) phys. adhered to an
     insol. substrate, e.g. nonwoven. The insol. polymeric amine dye absorber
     is dye-selective, preferentially binding fugitive dyes in a wash soln.,
     rather than detergent components or fabrics. The laundry additive article
     may comprise addnl. components including a dye transfer
     inhibitor and a signal to visually indicate that fugitive
     dyes were scavenged. Amberlite IRA 35 was an example of
     a dye absorber, which could be affixed to a two ply web.
     nonwoven bound polymeric amine dye absorber; web bound polymeric amine dye
     absorber; laundering aid polymeric amine dye absorber
TΤ
     Dyes
         (absorbers and transfer inhibitors; polymeric amine
        dye absorber for selectively absorbing and inhibiting transfer
        of extraneous dyes in the wash)
IT
     Nonwoven fabrics
         (bound with polymeric amine dye absorber for selectively absorbing and
        inhibiting transfer of extraneous dyes in the wash)
IT
     Absorbents
         (for dyes; polymeric amine dye absorber for selectively absorbing and
        inhibiting transfer of extraneous dyes in the wash)
IT
     Detergents
         (laundry; polymeric amine dye absorber for selectively absorbing and
        inhibiting transfer of extraneous dyes in the wash)
     59680-46-5; Kymene 557H
IT
                                 91315-75-2, Kymene 2064
                                                             336787-09-8, Luresin
     RL: MOA (Modifier or additive use); USES (Uses)
         (crosslinker; polymeric amine dye absorber for selectively
        absorbing and inhibiting transfer of extraneous dyes in the wash)
ΙT
     67953-56-4P, Bis(hexamethylene)triamine-epichlorohydrin copolymer
     414870-23-8P, Imidazole-trimethylolpropane triglycidyl ether copolymer
     RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP
     (Preparation); USES (Uses)
         (polymeric amine dye absorber for selectively absorbing and inhibiting
        transfer of extraneous dyes in the wash)
                                      117197-37-2, Sokalan HP 56
IT
     76930-03-5, Amberlite IRA 35
     RL: MOA (Modifier or additive use); USES (Uses)
         (polymeric amine dye absorber for selectively absorbing and inhibiting
        transfer of extraneous dyes in the wash)
RE.CNT 5
               THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
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     91315-75-2
RN
     336787-09-8
RN
     67953-56-4P
RN
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76930-03-5
RN
      117197-37-2
RN
       ANSWER 12 OF 14 CAPLUS COPYRIGHT 2003 ACS
L6
AN.
       1999:723159 CAPLUS
DN
       131:324167
      Laundry detergent and/or fabric care compositions comprising a modified
TI
       transferase
       Smets, Johan; Barnabas, Mary Vijayarani; Showell, Michael Stanford; Boyer,
IN
       Stanton Lane; Convents, Andre Christian
       Procter & Gamble Co., USA
ÞΑ
       PCT Int. Appl., 106 pp.
SO
       CODEN: PIXXD2
DT
       Patent
       English
LA
IC
       ICM C12N009-42
            C12N009-10; C11D003-386; D06M016-00
       ICS
       46-5 (Surface Active Agents and Detergents)
       Section cross-reference(s): 7
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PRAI WO 1998-US8905
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       WO 1999-US9480
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                                   19990430
AB
       The present invention relates to a modified enzyme which comprises a
       catalytically active amino acid sequence of a transferase linked to an
       amino acid sequence comprising a Cellulose Binding Domain (CBD). A
       specific embodiment comprises CBD-transferase, which is dextransucrase or
       transglutaminase or Toruzyme linked by PEG(NPC)2 to the cellulose-binding
       domain Cellulozome from Clostridium cellulovorans. The laundry detergent
       and/or fabric care compn. preferably further comprises a detergent
       ingredient selected from an anionic surfactant (alkyl sulfate, alkyl
      ethoxy sulfate, linear alkylene sulfonate), nonionic surfactant (alkyl ethoxylate), cationic surfactants, enzymes (protease, cellulase, lipase,
       amylase), bleaching agents, dye transfer
       inhibiting agents, dispersants, and smectite clay. The present
       invention further relates to laundry detergent and/or fabric care compns.
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comprising such modified enzyme, for improved fabric care and cleaning benefits. ŚT transferase modified laundry detergent; fabric care compn modified transferase; cellulose binding domain transferase laundry detergent IT Enzyme functional sites (CBD (cellulose-binding domain); laundry detergent and/or fabric care compns. comprising a modified transferase) ΙŤ Surfactants (anionic; laundry detergent and/or fabric care compns. comprising a modified transferase) ΙT Surfactants (cationic; laundry detergent and/or fabric care compns. comprising a modified transferase) İΤ Trichoderma reesei (cellulose-binding domain of CBHI of; laundry detergent and/or fabric care compns. comprising a modified transferase) IT. Clostridium cellulovorans (cellulose-binding domain of Cellulozome of; laundry detergent and/or fabric care compns. comprising a modified transferase) IT Cellulomonas fimi (cellulose-binding domain of CenC or CenA or Cex from; laundry detergent and/or fabric care compns. comprising a modified transferase) Clostridium stercorarium IT(cellulose-binding domain of XynA of; laundry detergent and/or fabric care compris. comprising a modified transferase) IT Humicola insolens (cellulose-binding domain of family 45 of; laundry detergent and/or fabric care compns. comprising a modified transferase) IT Bacillus agaradhaerens (cellulose-binding domain of; laundry detergent and/or fabric care compris. comprising a modified transferase) Bleaching agents (laundry detergent and/or fabric care compns. comprising a modified transferase) ΙŤ Enzymes, uses RL: MOA (Modifier or additive use); USES (Uses) (laundry detergent and/or fabric care compns. comprising a modified transferase) Surfactants IT (nonionic; laundry detergent and/or fabric care compns. comprising a modified transferase) Clays, uses ÌΤ RL: MOA (Modifier or additive use); USES (Uses) (smectitic, transfer inhibiting agents; laundry detergent and/or fabric care compns. comprising a modified transferase) Amino acids, uses IT Dipeptides Disaccharides Oligosaccharides, uses Peptides, uses Polysaccharides, uses Proteins, general, uses Tripeptides RL: MOA (Modifier or additive use); USES (Uses) (substrate; laundry detergent and/or fabric care compns. comprising a modified transferase) ITDispersing agents Dyes (transfer inhibiting agents; laundry detergent and/or fabric care compns. comprising a modified transferase) 9012-54-8, Cellulase 37329-65-0, Cellobiohydrolase I RL: BSU (Biological study, unclassified); BIOL (Biological study) (cellulose-binding domain of; laundry detergent and/or fabric care compns. comprising a modified transferase)

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9000-92-4, Amylase
                           9001-62-1, Lipase
                                                9001-92-7, Proteinase
     9030-09-5D, Cyclomaltodextrin glucanotransferase, crosslinked
     with cellulose-binding domain
                                       9031-48-5D, Transglucosidase,
     crosslinked with cellulose-binding domain
                                                   9031-85-0D,
     Aminoacyltransferase, crosslinked with cellulose-binding domain
     9032-14-8D, Dextransucrase, crosslinked with cellulose-binding
              9033-07-2D, Glycosyltransferase, crosslinked with
     domain
     cellulose-binding domain 9047-61-4D, Transferase, crosslinked
     with cellulose-binding domain
                                       9054-54-0D, Acyltransferase,
     crosslinked with cellulose-binding domain
                                                   80146-85-6D,
     Transglutaminase, crosslinked with cellulose-binding domain
     89017-91-4D, Glucansucrase, crosslinked with cellulose-binding
              100630-46-4D, Alternansucrase, crosslinked with binding domain 141588-40-1D, Endoxyloglucan transferase,
     domain
     cellulose-binding domain
     crosslinked with cellulose-binding domain
     RL: MOA (Modifier or additive use); USES (Uses)
        (laundry detergent and/or fabric care compns. comprising a modified
        transferase)
IT:
     24991-53-5
                  150673-50-0
                                 198227-38-2
     RL: NUU (Other use, unclassified); USES (Uses)
        (linker; laundry detergent and/or fabric care compns. comprising a
        modified transferase)
IT
                               69-79-4, Maltose
                                                   9005-25-8, Starch, uses
     57-50-1, Sucrose, uses
     12619-70-4, Cyclodextrin
                                 37294-28-3, Xyloglucan
     RL: MOA (Modifier or additive use); USES (Uses)
        (substrate; laundry detergent and/or fabric care compns. comprising a
        modified transferase)
              THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
ŘΕ
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(4) Turner, R; US 5624537 A 1997 CAPLUS
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(6) Univ British Columbia; WO 9721822 A 1997 CAPLUS
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     9012-54-8
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     37329-65-0
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     9001-62-1
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     9001-92-7
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     37294-28-3
L6
     ANSWER 13 OF 14 CAPLUS
                               COPYRIGHT 2003 ACS
ΑN
     1999:723158 CAPLUS
DN
     131:324166
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Laundry detergent and/or fabric care compositions comprising a modified

TI

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cellulase
      Smets, Johan; Busch, Alfred; Baeck, Andre Cesar; Bettiol, Jean-Luc
IN
      Philippe; Boyer, Stanton Lane
PA
      The Procter & Gamble Company, USA
SO
      PCT Int. Appl., 88 pp.
      CODEN: PIXXD2
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LA
      English
      ICM C12N009-42
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      ICS C11D003-386; D06M016-00
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      46-5 (Surface Active Agents and Detergents)
      Section cross-reference(s): 7
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                                19990430
AB
      The present invention relates to a modified enzyme which comprises a
      catalytically active amino acid sequence of a cellulolytic enzyme linked
      to an amino acid sequence comprising a Cellulose Binding Domain (CBD)
      having a relative binding const. (Kr-a) for binding to amorphous cellylose
      higher than 2.4 L/g cellulose, preferably higher than 3.5 L/g cellul\phiS\epsilon,
      more preferably higher than 4 L/g cellulose, for selective binding and
      hydrolysis of amorphous cellulose of cotton contg. fabrics in a laundry
      and/or fabric care application. A specific embodiment comprises
      CBD-Cellulase, which is the cellulolytic enzyme core derived for the
      enzyme sold under the tradename Carezyme linked to the CBD of the CenC
      cellulase of Cellulomonas fimi or the cellulase E3 of Thermomonospora
      fusca. The laundry detergent and/or fabric care compns. preferably
      further comprise a detergent ingredient selected from cationic
      surfactants, smectite clay, dye transfer-
      inhibiting polymer, and builder component (in particular zeolite A
     or sodium tripolyphosphate). The present invention further relates to
     laundry detergent and/or fabric care compns. comprising this modified
     enzyme.
ST
     laundry detergent modified cellulase; fabric care compn modified cellulase
IT
     Enzyme functional sites
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(CBD (cellulose-binding domain); laundry detergent and/or fabric care compns. comprising a modified cellulase) A zeolites IT RL: MOA (Modifier or additive use); USES (Uses) (builder component; laundry detergent and/or fabric care compns. comprising a modified cellulase) Surfactants (cationic; laundry detergent and/or fabric care compns. comprising a modified cellulase) IT Fungi Humicola insolens . (cellulolytic enzyme from; laundry detergent and/or fabric care compns. comprising a modified cellulase) Enzymes, uses RL: MOA (Modifier or additive use); USES (Uses) (cellulolytic; laundry detergent and/or fabric care compns. comprising a modified cellulase) Bacteria (Eubacteria) Cellulomonas fimi Clostridium cellulolyticum Clostridium stercorarium Myxococcus xanthus Streptomyces reticuli Thermobifida fusca (cellulose-binding domain from; laundry detergent and/or fabric care compns. comprising a modified cellulase) IT Detergent builders Textiles (laundry detergent and/or fabric care compns. comprising a modified cellulase) IT Detergents (laundry; laundry detergent and/or fabric care compns. comprising a modified cellulase) Clays, uses RL: MOA (Modifier or additive use); USES (Uses) (smectitic; laundry detergent and/or fabric care compns. comprising a modified cellulase) IT Dyes (transfer inhibiting polymer; laundry detergent and/or fabric care compns. comprising a modified cellulase) IT 7758-29-4, Sodium tripolyphosphate RL: MOA (Modifier or additive use); USES (Uses) (builder component; laundry detergent and/or fabric care compns. comprising a modified cellulase) IT 9012-54-8D, Carezyme, crosslinked with cellulose-binding domain RL: MOA (Modifier or additive use); USES (Uses) (laundry detergent and/or fabric care compns. comprising a modified cellulase) IT 24991-53-5 150673-50-0 198227-38-2 RL: NUU (Other use, unclassified); USES (Uses) (linker; laundry detergent and/or fabric care compns. comprising a modified cellulase) RE.CNT THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ŔE (1) Genencor Int; WO 9217572 A 1992 CAPLUS (2) Genencor Int; WO 9322414 A 1993 CAPLUS (3) Genencor Int; WO 9423113 A 1994 CAPLUS (4) Jeffreys Brian; WO 9502675 A 1995 CAPLUS (5) Kao Corp; JP 06158097 A 1994 CAPLUS (6) Maglione, G; APPLIED AND ENVIRONMENTAL MICROBIOLOGY 1992, V58 (11), P3593 CAPLUS (7) Nielsen Jack Bech; WO 9701629 A 1997 CAPLUS (8) Tomme, P; BIOCHEMISTRY 1996, V35(44), P13885 CAPLUS

(9) Tomme, P; JOURNAL OF BACTERIOLOGY 1995, V177(15), P4356 CAPLUS

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     24991-53-5
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     ANSWER 14 OF 14 CAPLUS COPYRIGHT 2003 ACS
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     1998:430194
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TI
     Polyamine polymers from alternating aliphatic polyketones, their
     manufacture, and their use
     Kratz, Detlef; Lippert, Ferdinand; Schwab, Peter; Boeckh, Dieter; Perner,
IN
     Johannes
PA
     BASF A.-G., Germany
SO
     Ger. Offen., 16 pp.
     CODEN: GWXXBX
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     Patent
LA
     German
IC
     ICM C08G073-06
          C08G061-12; B01F017-52; C09K015-30; D06M015-61; C08G059-50;
          C10M149-22; D06P001-52
     35-8 (Chemistry of Synthetic High Polymers)
     Section cross-reference(s): 38, 40, 43, 46, 51, 62
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     PATENT NO.
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                                           DE 1996-19654058 19961223
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     DE 19654058
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                                           EP 1997-122116
     EP 850976
                            19980701
                                                             19971216
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     US 5952438
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                            19990914
                                            US 1997-992530
                                                             19971217
                                           JP 1997-354397
     JP 10218990
                       A2
                            19980818
                                                             19971224
PRAI DE 1996-19654058
                            19961223
     Polyamine polymers are manufd. by reaction of 1-alkene-CO alternating
     copolymers with NH3 or RNH2 (R = NH2, OH, C1-10 alkyl, C6-20 aryl, C7-20
     aralkyl, C7-20 alkaryl, or organosilane group), or reagents releasing NH3
     or RNH2 and hydrogenation. These polymers are useful in textile industry,
     detergents, adhesives, cosmetics, metal processing and extg., paper
     industry, gasoline, and lubricants.
     polyamine polymer aliph polyketone aminated hydrogenated; alternating
ST
     alkene carbon monoxide copolymer aminated; lubricant additive polyamine
     polymer; gasoline additive polyamine polymer; paper industry polyamine
     polymer; metal processing extg polyamine polymer; cosmetic polyamine
     polymer; adhesive polyamine polymer; detergent polyamine polymer; textile
     industry polyamine polymer
IT
     Polyketones
     RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or
     engineered material use); PREP (Preparation); RACT (Reactant or reagent);
     USES (Uses)
        (aliph.; polyamine polymers from alternating aliph. polyketones)
IT
        (creams; polyamine polymers from alternating aliph. polyketones for
        skin creams)
ΙT
     Detergents
        (dishwashing; polyamine polymers from alternating aliph. polyketones
        for additives for dishwashing detergents)
ΙŤ
     Recycling
        (metal; polyamine polymers from alternating aliph. polyketones for
        metal recycling)
IT
     Polyamines
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (polyamine polymers from alternating aliph. polyketones)
IT
     Sizes (agents)
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(polyamine polymers from alternating aliph. polyketones for additives for sizes) ΙT Adhesives Crosslinking agents (polyamine polymers from alternating aliph. polyketones for adhesive crosslinkers) ΙT Complexing agents (polyamine polymers from alternating aliph. polyketones for complexing agents) ΙŤ Corrosion inhibitors (polyamine polymers from alternating aliph. polyketones for corrosion inhibitors) IT Dispersing agents (polyamine polymers from alternating aliph. polyketones for dispersants) Detergents Dyes (polyamine polymers from alternating aliph. polyketones for dye -transfer inhibitors in detergents) ΙT Epoxy resins, uses RL: POF (Polymer in formulation); USES (Uses) (polyamine polymers from alternating aliph. polyketones for epoxy resin crosslinkers) ITGasoline additives (polyamine polymers from alternating aliph. polyketones for gasoline additives) ÍΤ Hair preparations (polyamine polymers from alternating aliph. polyketones for hair prepns.) ΙT Lubricants (polyamine polymers from alternating aliph. polyketones for lubricants) ΙT (polyamine polymers from alternating aliph. polyketones for papermaking auxiliaries) ITCosmetics Solubilizers (polyamine polymers from alternating aliph, polyketones for solubilizers for cosmetics) IT Stabilizing agents (polyamine polymers from alternating aliph, polyketones for stabilizers for polyoxyalkylenes) ΙT Polyoxyalkylenes, uses RL: POF (Polymer in formulation); USES (Uses) (polyamine polymers from alternating aliph. polyketones for stabilizers for polyoxyalkylenes) ITTextiles (polyamine polymers from alternating aliph. polyketones for textile treatment) IT Colloids (protective; polyamine polymers from alternating aliph. polyketones for protective colloids) IT Polyoxyalkylenes, preparation RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (reaction products with aminated, hydrogenated alkene-carbon monoxide alternating copolymers, surface-active; polyamine polymers from alternating aliph. polyketones) TT Metals, processes RL: PEP (Physical, engineering or chemical process); PROC (Process) (refining; polyamine polymers from alternating aliph. polyketones for metal extg.) ΙŤ 111190-67-1DP, Carbon monoxide-ethylene alternating copolymer, aminated, hydrogenated

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or

engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (polyamine polymers from alternating aliph. polyketones) · IT 506-87-6DP, Ammonium carbonate, reaction products with alkene-carbon monoxide alternating copolymers, hydrogenated 7664-41-7DP, Ammonia, reaction products with alkene-carbon monoxide alternating copolymers, hydrogenated, preparation RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (polyamine polymers from alternating aliph. polyketones) ΙT 7803-49-8, Hydroxylamine, uses RL: NUU (Other use, unclassified); USES (Uses) (polyamine polymers from alternating aliph. polyketones for stabilizers for hydroxylamine) 7664-93-9DP, Sulfuric acid, salts with aminated, hydrogenated IT alkene-carbon monoxide alternating copolymers, preparation 25322-68-3DP, Polyethylene glycol, reaction products with aminated, hydrogenated alkene-carbon monoxide alternating copolymers RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (surface-active; polyamine polymers from alternating aliph. polyketones) RN 111190-67-1DP 506-87-6DP RNRN 7664-41-7DP

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7664-93-9DP 25322-68-3DP

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